

REMARKS

The Office Action in the above-identified application has been carefully considered and this amendment has been presented to place this application in condition for allowance. Accordingly, reexamination and reconsideration of this application are respectfully requested.

Claims 1-13 and 24-25 are in the present application. It is submitted that these claims were patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. § 112. The changes to the claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. sections 101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled. Claims 14-23 and 26-27 are canceled.

Applicants affirm the provisional election of Species 1, Claims 1-13, 24 and 25 made by telephone on May 7, 2004. Withdrawn claims 14-23 and 26-27 are canceled.

The title of the invention was objected to as not being descriptive. In response, Applicants have replaced the title to be clearly indicative of the invention to which the claims are directed. Accordingly, Applicants believe this objection has been overcome.

Claims 1-3, 5-6, and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogata et. al. (U.S. Patent 5,926,791) in view of Chiu et al. (U.S. Patent 6,229,926). A distinguishing characteristic of the invention is "using weighting coefficients of a table provided

at the outset for each block area in a sub-band generated by the wavelet transform.” (Claim 1; Claims 7, 24 and 25 contain similar limitations) Applicants believe neither Ogata nor Chiu meet this feature of the invention. Although the references disclose sub-bands, they fail to disclose the application of the block area concept to these sub-bands. Typically, block areas are used only in reference to the input picture in the spatial domain and not to the sub-bands in the frequency domain. Further, the present invention has “wavelet transform means for applying a wavelet transform in the horizontal and vertical directions each time a number of lines required for the wavelet transform is stored in said memory means.” (Claim 1; Claims 7, 24 and 25 contain similar limitations) In other words, the present invention performs the wavelet processing on the input picture as soon as enough lines are stored in memory to complete the block for processing. As noted by the Examiner, “Ogata does not teach the features related to the line-by-line wavelet process of Claim 1.” (Office Action page 5) Rather, the Examiner relies on Chui’s tile-by-tile processing of the image to meet these features. However, as indicated by step 252 of Figure 6 and step 300 of Figure 7, Chui stores the entire image, divides the images into tiles, and then processes each tile. Chui does not disclose processing tiles as sufficient lines comprising each tile are stored in memory. Moreover, the present invention performs a “block picture analysis” on each block area of the input picture and uses this information to change the weighting coefficients. (Element 1, Figure 1) Neither Ogata nor Chui disclose analogous features to meet the limitations recited in the claims that cover this feature. Accordingly, for at least these reasons, Ogata and Chiu fail to obviate the present invention and the rejected claims should now be allowed.

Claims 7-10, 12-13, and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogata in view of Chiu and Ribas-Corberat et al. (U.S. Patent 6,111,991). Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogata in view of Chiu and Keith et al. (U.S. Patent 5,881,176). Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogata in view of Chiu and Ribas-Corberat and Keith. However, Ribas-Corberat and Keith are relied upon solely to meet limitations in various dependent claims. However, since the rejected dependent claims inherit the limitations of independent claims 1 and 7, the rejection based on the additional references to Ribas-Corberat and Keith should be withdrawn in view of the foregoing discussion.

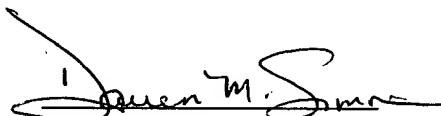
In view of the foregoing amendment and remarks, it is respectfully submitted that the application as now presented is in condition for allowance. Early and favorable reconsideration of the application are respectfully requested.

An extension of time fee is deemed to be required for the filing of this amendment. No additional fees are anticipated, but if such are required, the Examiner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account No. 50-0320.

If any issues remain, or if the Examiner has any further suggestions, he/she is invited to call the undersigned at the telephone number provided below. The Examiner's consideration of this matter is gratefully acknowledged.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By:

A handwritten signature in black ink, appearing to read "Darren M. Simon", written over a horizontal line.

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